
REMARKS

Applicant has reviewed and considered the office action mailed on June 3, 2003 and the references cited therewith.

Claims 1 and 3 are amended, claims 17, 18, and 56 are canceled, and claims 57, 58, and 59 are added; as a result, claims 1-6, 9-10, 36, 38, 45-55, and 57-59 are pending in the above-identified application.

§ 102 Rejection of the Claims

Claims 1, 3, 5, 6, and 36 were rejected under 35 U.S.C. § 102(a) as being anticipated by Liu (U.S. Patent No. 6,030,861). Applicant does not admit that Liu is prior art and reserves the right to "swear behind" Liu as provided for under 37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claims 5, 6 and 36.

Claim 1, as amended, recites, "preparing a substrate with only PWELLS." In contrast, Liu, in FIG. 1 shows preparing a substrate with a PWELL (P-TANK) and an NWELL (N-TANK). Hence, Liu fails to teach "preparing a substrate with only PWELLS," so Liu does not teach each of the elements of claim 1. Thus, the office action fails to state a *prima facie* case of anticipation with respect to claim 1. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 1.

Claim 3 is dependent on claim 1. For reasons analogous to those stated above and elements in the claim, applicant respectfully submits that the office action fails to state a *prima facie* case of anticipation with respect to claim 3. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 3.

Claim 5 recites, "forming a first gate structure including a PWELL without using a mask." In contrast, Liu fails to teach how the P-TANK is formed. Hence, Liu fails to teach "forming a first gate structure including a PWELL without using a mask," so Liu does not teach each of the elements of claim 5. Thus, the office action fails to state a *prima facie* case of anticipation with respect to claim 5. Therefore, application requests withdrawal of the rejection and reconsideration and allowance of claim 5.

Claim 6 is dependent on claim 5. For reasons analogous to those stated above and elements in the claim, applicant respectfully submits that the office action fails to state a *prima facie* case of anticipation with respect to claim 6. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 6.

Claim 36 recites, "forming one or more gate structures including a PWELL without a mask." In contrast, Liu fails to teach how the P-TANK (PWELL) is formed. Hence, Liu fails to teach "forming one or more gate structures including a PWELL without a mask," so Liu does not teach each of the elements of claim 36. Thus, the office action fails to state a *prima facie* case of anticipation with respect to claim 36. Therefore, application requests withdrawal of the rejection and reconsideration and allowance of claim 36.

§ 103 Rejection of the Claims

Claims 2, 4, and 45 - 48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 6,030,861) as applied to claims 1 and 3 above, and further in view of Gardner *et al.* (U.S. Patent No. 6,051,471). Applicant does not admit that either Liu or Gardner *et al.* is prior art and reserves the right to "swear behind" Liu and Gardner *et al.* as provided for under 37 C.F.R. 1.131.

Claims 2, 4, and 45 - 48 are dependent on claim 1, as amended. Claim 1, as amended, recites, "preparing a substrate with only PWELLS." In contrast, Liu, in FIG. 1 shows preparing a substrate with a PWELL (P-TANK) and an NWELL (N-TANK). Hence, Liu fails to teach "preparing a substrate with only PWELLS," so Liu does not teach or suggest each of the elements of claim 1. Also, in contrast, Gardner *et al.*, in the first sentence of the abstract, teaches "[a]n asymmetrical N-channel IGFET and a symmetrical P-channel IGFET," so Gardner *et al.* does not teach or suggest each of the elements of claim 1. Hence, neither Liu nor Gardner *et al.*, either alone or in combination, teach or suggest each of the elements of claim 1. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 1. Therefore, since claims 2, 4, and 45 - 48 are dependent on claim 1, the office action fails to state a *prima facie* case of

obviousness with respect to claims 2, 4, and 45 - 48. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 2, 4, and 48 - 48.

Claims 49 - 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 6,030,861) as applied to claims 5 and 6 above, and further in view of Gardner *et al.* (U.S. Patent No. 6,051,471). Applicant does not admit that either Liu or Gardner *et al.* is prior art and reserves the right to "swear behind" Liu and Gardner *et al.* as provided for under 37 C.F.R. 1.131. Applicant traverses the rejection of claims 49 - 54.

Claims 49 - 54 are dependent on claim 5. Claim 5 recites, "forming a first gate structure including a PWELL without using a mask." In contrast, Liu fails to teach how the P-TANK (PWELL) is formed. Hence, Liu fails to teach or suggest "forming a first gate structure including a PWELL without using a mask," so Liu does not teach or suggest each of the elements of claim 5. Also, in contrast, Gardner *et al.*, in the first sentence of the abstract, teaches "[a]n asymmetrical N-channel IGFET and a symmetrical P-channel IGFET," so Gardner *et al.* does not teach or suggest "forming a first gate structure including a PWELL without using a mask." Hence, neither Liu nor Gardner *et al.*, either alone or in combination, teach or suggest each of the elements of claim 5. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 5. Since claims 49 - 54 are dependent on claim 5, the office action fails to state a *prima facie* case of obviousness with respect to claims 49 - 54. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 49 - 54.

Claim 38 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 6,030,861). However, in the body of the rejection the Examiner adds an argument related to Gardner *et al.* Applicant does not admit that either Liu or Gardner *et al.* is prior art and reserves the right to "swear behind" Liu and Gardner *et al.* as provided for under 37 C.F.R. 1.131. Applicant traverses the rejection of claim 38.

Claim 38 recites, "forming one or more gate structures including a PWELL using blanket implants." The office action, at paragraph 10, states "Gardner teaches a method for forming a

CMOS device in which a doped polysilicon layer for forming gate structures is formed by blanket implantation." Applicant respectfully disagrees with this interpretation of Gardner *et al.* As can be seen in Fig. 1A of Gardner *et al.*, the regions 106 and 108 (WELLS) are formed prior to depositing "a blanket layer of undoped polysilicon." Thus, Gardner *et al.* does not teach or suggest "forming one or more gate structures including a PWELL using blanket implants." In addition, since Liu assumes the existence of the P-TANK (PWELL) in Fig. 1, Liu does not teach or suggest "forming one or more gate structures including a PWELL using blanket implants." Hence, neither Gardner *et al.* nor Liu, either alone or in combination, teach or suggest "forming one or more gate structures including a PWELL using blanket implants." Thus, the office action fails to state a *prima facie* case of obviousness with respect to claim 38. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 38.

Claims 9, 10, and 55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 6,030,861). Applicant traverses the rejections of claims 9, 10, and 55.

Claim 9 recites, "forming a first gate structure including a PWELL having a depth of about 200 nanometers without using a mask." The office action, in paragraph 8, asserts that this element is taught by Liu. Applicant respectfully disagrees. Applicant's representative has studied Liu, and respectfully submits that Liu does not teach or suggest that a PWELL is formed without using a mask. Hence, Liu does not teach or suggest each of the elements of claim 9, so the office action fails to state a *prima facie* case of obviousness with respect to claim 9. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 9.

Claim 10 and 55 are dependent on claim 9. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the office action fails to state a *prima facie* case of obviousness with respect to claims 10 and 55. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 10 and 55.

Claims 17, 18, and 56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu (U.S. Patent No. 6,030,861). Claims 17, 18, and 56 are cancelled, so the rejections are moot.

§ 103 Rejections that Combine Liu and Gardner et al.

The office action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338 (Fed. Cir. 2002). The office action fails to meet this burden. The statements in the office action as to why the combinations would be obvious do not constitute specific, objective evidence of record. They are merely conclusory statements. For example, in paragraphs 4, 6, and 8 the office action states, "It would have been obvious to one of ordinary skill in the art of making semiconductor devices form the first gate structure by blanket implantation because in doing so use of masking is avoided." However, nothing in this statement explains the reasoning that connects the specific, objective evidence of record to the finding of a suggestion or motivation to combine the reference teachings. It is merely a conclusory statement that is proscribed under *In re Sang Su Lee*. Hence, the office action fails to meet the standard established by *In re Sang Su Lee* for finding a suggestion or motivation to combine the reference teachings. Thus, the office action fails to state a *prima facie* case of obviousness with respect to claims 2, 4, 17, 18, and 45 - 54. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 2, 4, 17, 18, and 45 - 54.

AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.111
Serial Number: 09/782,743
Filing Date: February 13, 2003
Title: DUAL DOPED GATES

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Docket: 303.592US1

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone applicant's attorney at 612-371-2109 to facilitate prosecution of the above identified patent application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 3rd day of September, 2003.

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